

## TOPICS OF ALGEBRA REVIEW

<b>Purpose</b>	District mathematics teachers and leaders are encouraged to use this tool to assess the degree of congruence between the suggested topics of school algebra recommended by the National Mathematics Advisory Panel and the standards, curriculum, and assessments currently in use in the district. The purpose is identifying potential gaps in topic coverage.
<b>Materials</b>	<p>Topics of Algebra Review Grid</p> <p>List of School Algebra Topics on page 16 of the National Mathematics Advisory Panel Report</p> <p>Copies of: district algebra standards, pacing guides, course objectives, algebra textbooks and key supplementary materials, algebra assessments</p>
<b>Media</b>	<i>School Algebra Topics</i> , multimedia overview. (6:41)
<b>Topic</b>	National Math Panel: Major Topics of School Algebra
<b>Practice</b>	Topics of Algebra

### Topics of Algebra Review

1. Identify the individuals who represent leadership for middle and high school mathematics in the district. Depending on the configuration of roles and responsibilities in your district, in addition to experienced mathematics teachers, the group might include mathematics supervisors, curriculum specialists, building principals, and team or department leaders.
2. Convene a meeting of the group to review the Panel's recommended topics of school algebra. Review the multimedia overview, *School Algebra Topics*, to preview the process used by the example district. The overview demonstrates how to conduct a topic review. Provide each participant or team with a copy of the Topics of Algebra Review Grid for note-taking; the grid includes the suggested topics of school algebra. Have handy the appropriate materials needed for review of district standards, curriculum, and assessments such as course objectives, pacing guides, textbooks, and supplementary materials.
3. Ask teachers from each school to move through the review by addressing the major topic headings as a team. For each topic heading and sub-topic, they should record in column two the district (or state) standards that address the algebra topic. In columns three, four, and five, they should record in which course they expect students to attain proficiency in the topic and make any appropriate notes (e.g., related to availability or lack of availability of teaching/practice materials). Columns three and four refer to traditional algebra courses and column five to alternative sequences such as Integrated Mathematics. Re-name or add more columns to fit the courses represented in the district's schools.
4. Once all teams have finished with the review, do a group summary to identify where topic coverage is strong and note any gaps in topic coverage. Pay special attention to the overlaps and gaps that may occur in course sequences that span schools and levels. For example, *how well aligned are the middle school Algebra I courses with secondary school Algebra II courses?*
5. The results of the topic review form a blueprint for curricular decision making by mathematics leaders.